

65. A method for reducing the pathogenicity of reactive epitopes and moieties of plants, animals, microorganisms, or derivatives thereof, comprising:
treating with super-critical fluid or critical liquid carbon dioxide or nitrogen.

66. A method according to claim 62, wherein pathogens are so degraded as to lose their pathogenicity.

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67. A method for reducing allergenic reactive epitopes and moieties of plants, animals, microorganisms, or derivatives thereof, comprising:
treating with super critical fluid or critical liquid carbon dioxide or nitrogen.

68. A method according to claim 67, wherein the allergens are so degraded as to become essentially hypoallergenic.

69. A method for reducing the allergenicity of a food or food-derived product, comprising:
treating the food or food-derived product in intact, sliced, diced, chopped, powdered, paste or liquid form with super critical fluid or critical liquid carbon dioxide or nitrogen.

70. The method of claim 69, wherein the food or food-derived product is in sliced, diced, chopped, powdered, or liquid form.

71. The method of claim 70, wherein the food or food-derived product is in powder form, and wherein the powder is so degraded by the treatment that there is an at least about 50% reduction in the particle size of the powder.

72. The method of claim 71, wherein there is an at least about 65% reduction in the particle size of the powder.

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73. The method of claim 69, wherein the food or food-derived product is in the form of at least partially defatted powder of at least one ingredient selected from the group consisting of grains, egg, soybean, vegetables, fruits, seafood, fish, milk, and nuts.

74. A method for reducing the allergenicity of a food or food-derived product in powder form, comprising:

treating the powder with super critical fluid or critical liquid carbon dioxide or nitrogen.

75. The method of claim 74, wherein the powder comprises at least partially defatted powder of at least one ingredient selected from the group consisting of grains, egg, soybean, vegetables, fruits, seafood, fish, milk, and nuts.

76. A method for reducing the allergenicity of a food or food-derived product, comprising:

altering the three-dimensional structure of an allergenic component of the food or food-derived product by treating the food or food-derived product with super critical fluid or critical liquid carbon dioxide or nitrogen.

77. The method of claim 76; wherein the food or food-derived product comprises at least one ingredient selected from the group consisting of grains, egg, soybean, vegetables, fruits, seafood, fish, milk, and nuts.

78. The method of claim 77, wherein the food or food-derived product comprises milk, and the treated food or food-derived product is free from allergenic milk protein detectable using immunologic studies.

79. The method of claim 78, wherein the treated food or food-derived product is free from allergenic milk protein detectable using ELISA or RIA.

80. The method of claim 76, wherein the food or food-derived product comprises fat and wherein the fat is not removed from the treated food or food-derived product by the step of treating the food or food-derived product with super-critical fluid or critical liquid carbon dioxide or nitrogen.

81. The method of claim 76, wherein the food or food-derived product comprises fat and wherein the functionality of the fat is enhanced by the step of treating the food or food-derived product with super-critical fluid or critical liquid carbon dioxide or nitrogen, enabling a reduction in the total fat content of the food or food-derived product.

82. A biologic product derived from plant, animal, or microorganism, wherein the pathogenicity of at least one biologic component of the product has been substantially reduced by treatment with super-critical fluid or critical liquid carbon dioxide or nitrogen.

83. A biologic product according to claim 82, wherein the pathogenicity of at least one organism selected from the group consisting of bacteria, fungi, viruses, and prion particles has been reduced, as measured by biologic measures, including culturing.

84. A food or food-derived product comprising at least one ingredient selected from the group consisting of grains, egg, soybean, vegetables, fruits, seafood, fish, milk, and nuts, wherein the said ingredient is at least 99% by weight free of allergenic protein as measured using immunologic studies.

85. A food or food-derived product according to claim 84, wherein the said ingredient is at least 99% by weight free of allergenic protein as measured using ELISA or RIA.

86. A food or food-derived product according to claim 84, wherein the said at least one ingredient has not more than 1/285 by weight of the natural level of allergenic protein as measured using immunologic studies.

87. A food or food-derived product according to claim 84, wherein the protein has been rendered non-allergenic by treatment with supercritical or critical carbon dioxide or liquid nitrogen.

88. A food or food-derived product comprising at least one ingredient selected from the group consisting of grains, egg, soybean, vegetables, fruits, seafood, fish, milk, and nuts, wherein the said ingredient contains no detectable allergenic protein as measured by immunologic studies.

89. A food or food-derived product according to claim 88, wherein the said ingredient contains no detectable allergenic protein as measured using ELISA or RIA.

90. A food or food-derived product according to claim 88, comprising milk, and which comprises no detectable allergenic milk protein as measured using ELISA or RIA.

91. A biologic product derived from plant, animal, or microorganism, which product has been rendered substantially hypoallergenic by treatment with super-critical fluid or critical liquid carbon dioxide or nitrogen.

92. A product according to claim 91, which contains significantly reduced allergenic protein, as measured by immunologic studies.

93. A product according to claim 92, which contains no allergenic protein detectable by ELISA or RIA.

94. A product according to claim 91, which is a vaccine extract for testing, treatment, or preventive or prophylactic treatment.

95. A vaccine extract according to claim 94, wherein the pathogenicity of reactive epitopes and moieties of plants, animals, microorganisms is reduced, or allergenic reactive epitopes

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and moieties are reduced, by said treatment with super-critical fluid or critical liquid carbon dioxide or nitrogen of raw material, processed raw material, extracted material, or freeze-dried processed or extracted material, at any stage in the production of said vaccine extract.

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